

Emergency Medical Services Task Force

Spring 2018 update to
Tompkins County Council of Governments

Irene Weiser
March 22, 2018

Tompkins County Council of Governments

- RESOLVED, that TCCOG establishes an Emergency Medical Services Task Force (EMS-TF), to identify potential strategies to continue to **meet the public's needs and expectations, and ensure timely, competent, affordable emergency medical and transport services** to County residents.... (Oct 2016)

EMS Task Force Members

- Chair: Irene Weiser, Town of Caroline Councilmember
- Bill Goodman - Town of Ithaca, Town Supervisor
- Casey Powers - Town of Newfield Councilmember
- Patrick Brunner - Dryden-Etna Fire Dept, EMS provider
- Doug Keefe - Speedsville Fire Company, President TC Chiefs Association,
- George Tambourelle – V. of Cayuga Hts Fire Chief, Paramedic, Bangs Supervisor
- Edward Kokelenberg, Danby Fire Dept, Board of Commissioners
- Bill Gilligan- Ithaca Fire Department, Board of Fire Commissioners
- Robert Sparks- Ithaca Fire Department, Board of Fire Commissioners
- Lisa Holmes - At-Large, Office for the Aging
- Marcia Lynch - At Large, former City FD Volunteer Coordinator
- Dan Klein-Tompkins County Legislator, District 7
- Lee Shurtleff- Tompkins County Department of Emergency Response, Director
- Brian Wilbur- Tompkins County Department of Emergency Response
- Autumn Edwards- Administrative Support



- **Cornell Institute of Public Affairs (CIPA)**
 - Spring 2017, Fall 2017, Spring 2018
 - Rebecca Morgenstern-Brenner (Town of Danby)
 - Dan Lamb (Town of Dryden)
- **Cornell Systems Engineering**
 - Fall 2017, Spring 2018
 - Al George

Two Tiered Service Provision

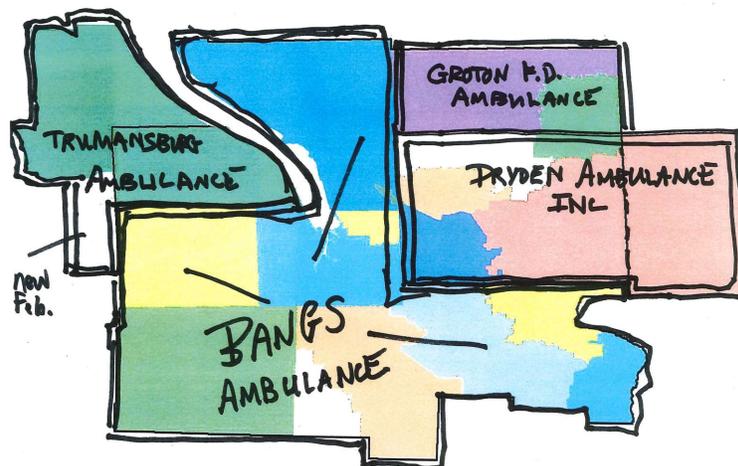
LOCAL RESCUE

- Assoc w/Fire Depts
- Volunteers
- Basic Life Support (BLS)
- Emergency Medical Technician (EMT)
- "First Response"
- No transport

AMBULANCE

- 4 Ambulance Services (Dryden, Groton, T'burg, Bangs)
- Paid Staff
- Advanced Life Support (ALS)
- Paramedic
- Transport

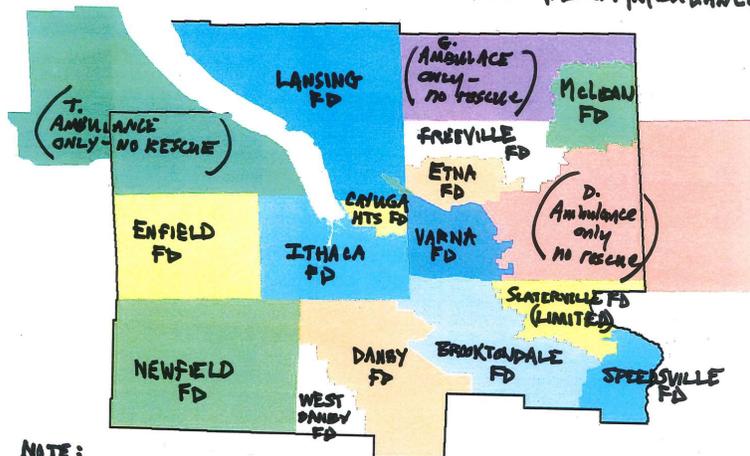
Ambulance Service



PRIMARY RESPONSE FOR ADVANCED LIFE SUPPORT-TRANSPORT

Local Rescue

FIRST RESPONSE - NON TRANSPORTING AGENCIES
 DUAL RESPONSE WITH DESIGNATED A.L.S. AMBULANCE



NOTE:

- (1) CAYUGA HEIGHTS ONLY A.L.S. FIRST RESPONSE
- (2) SLATERVILLE - only for cardiac arrest & lifting assistance as needed

Call Types

Protected by U.S. Patents 5,857,966; 5,969,187; 6,004,266; 6,010,451; 6,053,864; 6,076,065

NON-LINEAR RESPONSE LEVELS

CAPABILITY: BLS ← → ALS

RESPONSE TIME	COLD (Single)	A	C
	HOT (Multiple)	B	D

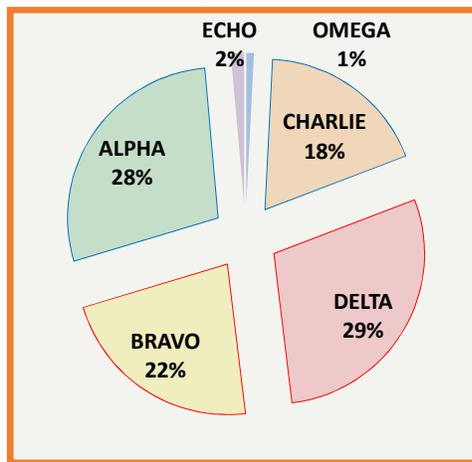
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In establishing local routine vs. emergency response assignments to match each MPDS code, consider the following:

1. Will time make a difference in the outcome?
2. How much time-leeway exists for that type of problem?
3. How much time can be saved driving in lights-and-siren mode?
4. When the patient gets to the hospital, will the time saved be significant compared with the time spent waiting for care such as X-rays, lab tests, etc.?

All actual response assignments and emergency modes are decided by local Medical Control and EMS Administration.

Tompkins Co



•Declining number of volunteers

- Aging out
- National trend = volunteerism down
- Big time-commitment

•Call Volume increasing

- 25% not true emergencies
- Aging care facilities, C.A.R.S.
- Frequent users
- Mental health, substance abuse

•Volunteer retention a challenge

- Onerous training, re-certification requirements
- High stress job – hours, vicarious trauma
- High and/or low call volume present challenges
- Leadership/cultural issues w/in some depts

•Ambulance service stressed

- Pay-scale not competitive
- Paramedics work for more than 1 agency
- Absorbing higher call demand

Fall 2017 CIPA and Sys Eng

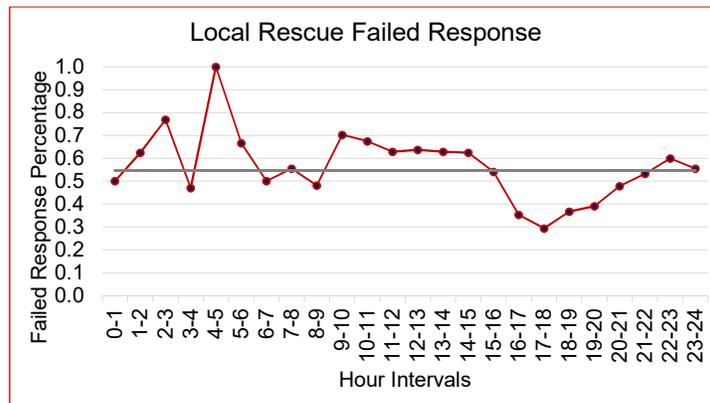


Call Volume by Town

Call Volume October 2016- September 2017					
	Population	Med. Age	Pop > 65 yrs	# of Calls	Calls/1000
Ulysses	5026	45.4	934	597	119
Groton	6097	42.2	973	599	98
Ithaca City and Town	50819	24.5	4172	4091	81
Enfield	3614	45.4	475	270	75
Newfield	5292	40.3	966	375	71
Dryden	14840	41.4	1850	943	64
Caroline	3358	43.9	446	213	63
Lansing	11347	38.5	1686	675	59
Danby	3462	47.9	770	132	38

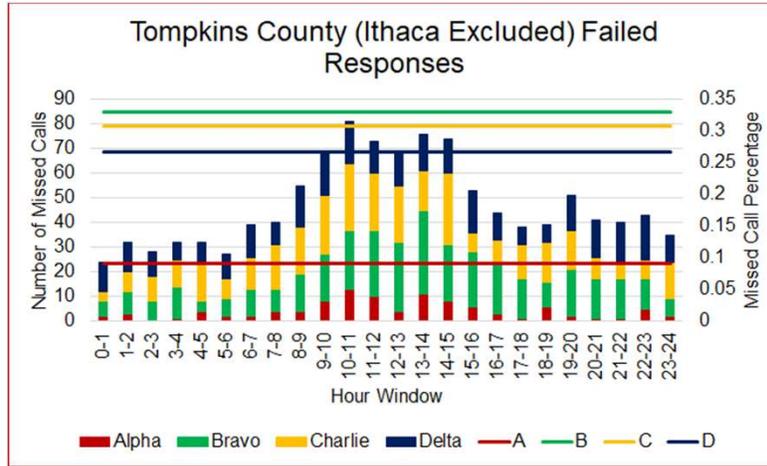
Ithaca City and Ithaca Town Combined for Accuracy. Cayuga Heights included in Ithaca Town

Rescue Squad Failed Response



- Average failed response rate: 49%
- All fire districts including the one above show **non-random systematic variation** (volunteer availability)
- All departments struggle to meet day-time demand

Rescue Response Rates



- Calls answered with highest regularity: "A" Determinant
- 11 locations account for 10.56% of calls ~400 calls a year
- All fire districts show non-random systematic variation (volunteer availability)

Rescue Response Times

<i>Response Time (Min) by Determinant/ Benchmark</i>									
	AVG	A	B	C	D	O	Met 10 Min	95%	75%
<i>Tompkins County (Ithaca Excluded)</i>	11.2	12.4	10.3	11.4	10.5	11.4	48.7%	21.2	14.1
Slaterville	18.4	21.7	14.3	19.0	17.0	20.3	11.5%	30.8	21.5
Danby	16.2	19.9	12.9	14.5	15.0	14.2	10.3%	27.1	18.3
Speedsville	13.7	9.8	23.4	15.4	14.9		33.3%	23.8	18.2
Newfield	13.5	16.9	11.9	13.5	12.3	13.3	25.0%	21.8	16.2
Brooktondale	13.4	15.3	13.3	13.3	12.0	10.3	25.2%	22.7	16.2
Etna	12.9	15.2	12.1	12.4	11.6	14.1	24.2%	19.1	15.0
West Danby	12.7	16.2	12.2	12.9	10.4	11.8	34.2%	23.3	16.1
Lansing	12.4	16.1	10.3	12.3	11.1	11.5	38.2%	22.4	15.5
Enfield	12.3	15.1	11.1	12.0	11.2	19.4	29.8%	19.4	14.7
Freeville	12.0	14.6	10.8	12.0	11.1	11.7	36.6%	19.8	14.7
Groton	11.1	11.7	10.9	11.7	10.4	9.4	51.7%	21.6	13.8
Trumansburg	10.4	10.4	10.6	10.7	10.0	9.9	57.6%	20.1	12.7
Varna	10.1	10.9	10.1	9.8	9.7		54.4%	17.1	12.1
McLean	9.6	9.2	9.9	10.5	9.1	6.4	60.9%	16.4	11.7
Dryden	8.4	8.7	8.3	8.8	7.8	10.7	74.8%	16.7	10.0
Cayuga Heights	7.5	8.1	7.4	7.2	6.8	8.4	85.5%	12.9	8.4

* Ithaca average response time: 7.3 minutes

** NFPA Standards Career: 6.5 min BLS, Volunteer: 9 min Urban, 10 min Suburban, 14 min Rural

Culture, Leadership, Succession

Please describe your primary reasons for leaving your volunteer agency:

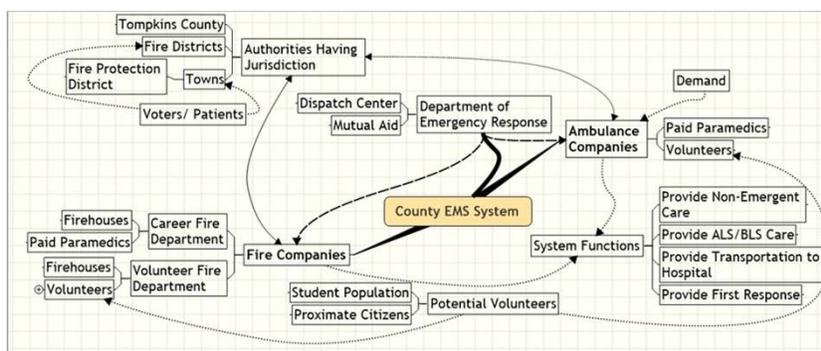
*"Very **high stress**, required to memorize large amounts of information, having to assume more **responsibility** than I am comfortable with, **more-experienced EMS providers behaving rudely** due to my inexperience."*

*"I felt **unwelcomed and underappreciated**. I ran into one too many occurrences of **unsafe operations**. Bringing on dozens of college students, failing to provide sufficient **trainings**, and covering up **mistakes** really caused me to leave. Things need to change."*

(Chiefs) Describe your agency's biggest challenge :

*We only have a few active members. We also have certain **members that bully others** out of the department because nobody wants to deal with them. I also feel that **we don't have a sturdy foundation in the officer ranks**. **Without a good foundation you can't build up**. You need the right people in the right positions but **without enough volunteers to choose from you have to settle**.*

EMS – Complex system



- Agencies operate independently, differing standards, expectations
- Legal, accountability, authority structures differ
- Dispatch doesn't know when/if rescue responders are available
- Recruitment not consistent, coordinated, centralized
- Training not convenient, coordinated
- Leadership and succession challenges
- Regular data collection needed to track system status

Recommendations

- The Tompkins County EMS System is extremely complex and requires comprehensive volunteer scheduling, synchronized training planning, and regular data tracking.
- The greatest threat to patient survivability is geographical distance to a first responder. Response time standards must match call severity; rural areas must be addressed individually.
- EMS demand is predictable. In the long run, the effect of increasing call volume and decreasing volunteerism may be mitigated through proper resource allocation and placement.

Recommendations (cont)

- Address response failures and mitigate call volume
- Increase volunteerism: recruit and develop
- Increase predictability and create shared vision
- Data collection to assess capacity/progress
- Optimize County EMS resources

Spring 2018

Near Term Solutions

CIPA Focus Groups - explore EMS service agency interest in programs to assist/support with

- EMS volunteer recruitment
- EMS training
- EMS scheduling coordination, mutual aid
- Leadership development

Spring 2018

Mid Term Solutions

HHS Committee- community programs

- Community paramedicine
- Rural health clinics
- Mental health alternatives
- Assisted Living/Elder facilities
- C.A.R.S
- Frequent Callers / AINS

Workforce Development

TST BOCES – EMS, Fire Career paths

Spring 2018

Longer Term Solutions

SYS ENG – System Optimization

- Distribution, location, coordination of resources
 - Response rates, response times
 - Number, type of personnel needed
 - Resource pooling, coordination
- Financial impacts of paid staff
- Legal
- EMS districts?
- Large Scale Emergency Response – build capacity, optimize, integrate, coordinate

Discussion

